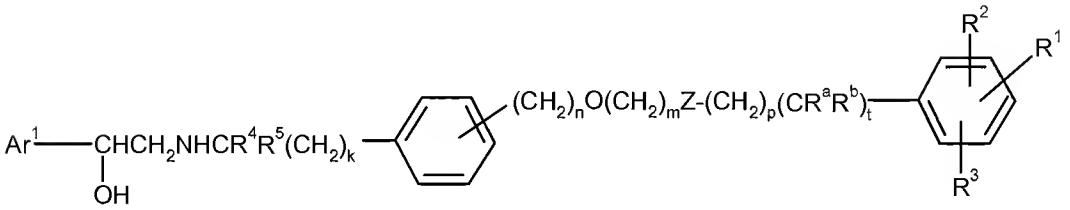
Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

What is claimed is:

1. (Currently Amended) A compound of formula (I):



(I)

or a salt, solvate, or physiologically functional derivative thereof, wherein:

R^1 is selected from hydrogen, C_{1-6}alkyl, hydroxy, cyano, nitro, halo, C_{1-6}haloalkyl, XCO_2R^8, $-XC(O)NR^7R^8$, $-XNR^6C(O)R^7$, $-XNR^6C(O)NR^7R^8$, $-XNR^6C(O)NC(O)NR^7R^8$, $-XNR^6SO_2R^7$, $-XSO_2NR^9R^{10}$, XSR^6, $XSOR^6$, XSO_2R^6, $-XNR^7R^8$, $-XNR^6C(O)OR^7$,
or R^1 is selected from -X-aryl, -X-hetaryl, or -X-(aryloxy), each optionally substituted by 1 or 2 groups independently selected from hydroxy, C_{1-6}alkoxy, halo, C_{1-6}alkyl,
C_{1-6}haloalkyl, $-NR^6C(O)R^7$, SR^6, SOR^6, $-SO_2R^6$, $-SO_2NR^9R^{10}$, $-CO_2R^8$, $-NR^7R^8$, or hetaryl optionally substituted by 1 or 2 groups independently selected from hydroxy, C_{1-6}alkoxy, halo, C_{1-6}alkyl, or C_{1-6}haloalkyl;

X is $-(CH_2)_q-$ or C_{2-6} alkenylene;

q is an integer from 0 to 6;

R^6 and R^7 are independently selected from hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, aryl, hetaryl, hetaryl(C_{1-6}alkyl)- and aryl(C_{1-6}alkyl)- and R^6 and R^7 are each

independently optionally substituted by 1 or 2 groups independently selected from halo, C_{1-6}alkyl,
C_{3-7} cycloalkyl, C_{1-6} alkoxy, C_{1-6}haloalkyl, -NHC(O)(C_{1-6}alkyl), -SO_2(C_{1-6}alkyl), -SO_2(aryl), -CO_2H, and -CO_2(C_{1-4}alkyl), -NH_2, -NH(C_{1-6}alkyl), aryl(C_{1-6}alkyl)-, aryl(C_{2-6}alkenyl)-,
aryl(C_{2-6}alkynyl)-, hetaryl(C_{1-6}alkyl)-, -$NHSO_2$aryl, -NH(hetarylC_{1-6}alkyl), -$NHSO_2$hetaryl,
-$NHSO_2$(C_{1-6}alkyl), -NHC(O)aryl, or -NHC(O)hetaryl:

R^8 is selected from hydrogen, C_{1-6}alkyl and C_{3-7} cycloalkyl;

or R^7 and R^8, together with the nitrogen atom to which they are bonded, form a 5-, 6- or 7- membered nitrogen – containing ring;

R^9 and R^{10} are independently selected from hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, aryl, hetaryl, hetaryl(C_{1-6}alkyl)- and aryl(C_{1-6}alkyl)-, or R^9 and R^{10}, together with the nitrogen to which they are bonded, form a 5-, 6-, or 7- membered nitrogen containing ring;
and R^9 and R^{10} are each optionally substituted by one or two groups independently selected from halo, C_{1-6}alkyl, and C_{3-7}cycloalkyl, C_{1-6}haloalkyl;

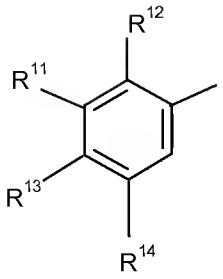
R^2 is selected from hydrogen, hydroxy, C_{1-6}alkyl, C_{1-6}alkoxy, halo, aryl, aryl(C_{1-6}alkyl)-, C_{1-6}haloalkoxy, and C_{1-6}haloalkyl;

R^3 is selected from hydrogen, hydroxy, C_{1-6}alkyl, C_{1-6}alkoxy, halo, aryl, aryl(C_{1-6}alkyl)-,
C_{1-6}haloalkoxy, and C_{1-6}haloalkyl; and

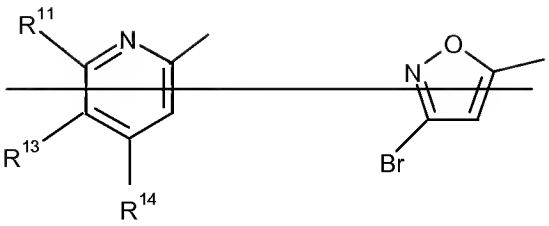
R^4 and R^5 are independently selected from hydrogen and C_{1-4} alkyl with the proviso that the total number of carbon atoms in R^4 and R^5 is not more than 4;

R^a and R^b each independently represent hydrogen or C_{1-4}alkyl;

Ar^1 is a group selected from

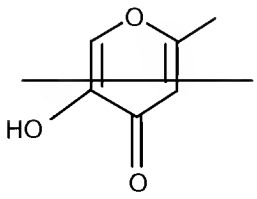


(a)



~~(b)~~ ~~(c)~~

~~and~~



~~(d)~~

wherein R^{11} represents hydrogen, halogen, $-(CH_2)_rOR^{15}$, $-NR^{15}C(O)R^{16}$, $-NR^{15}SO_2R^{16}$,
$-SO_2NR^{15}R^{16}$, $-NR^{15}R^{16}$, $-OC(O)R^{17}$ or $OC(O)NR^{15}R^{16}$,
and R^{12} represents hydrogen, halogen or C_{1-4} alkyl;

or R^{11} represents $-NHR^{18}$ and R^{12} and $-NHR^{18}$ together form a 5- or 6-membered heterocyclic ring;

R^{13} represents hydrogen, halogen, $-OR^{15}$ or $-NR^{15}R^{16}$;

R^{14} represents hydrogen, halogen, haloC_{1-4} alkyl, $-OR^{15}$, $-NR^{15}R^{16}$, $-OC(O)R^{17}$ or $OC(O)NR^{15}R^{16}$;

R^{15} and R^{16} each independently represents hydrogen or C_{1-4} alkyl, or in the groups

$-NR^{15}R^{16}$, $-SO_2NR^{15}R^{16}$ and $-OC(O)NR^{15}R^{16}$, R^{15} and R^{16} independently represent hydrogen or C_{1-4} alkyl or together with the nitrogen atom to which they are attached form a 5-, 6- or 7- membered nitrogen-containing ring,

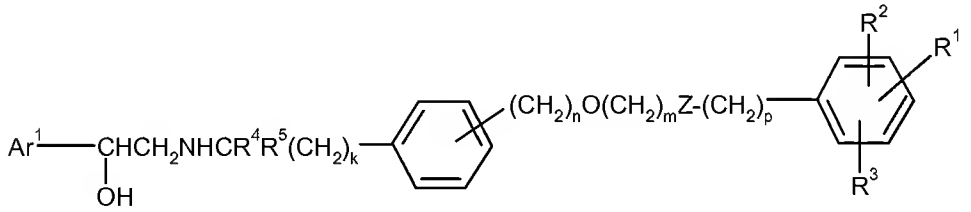
R^{17} represents an aryl group which may be unsubstituted or substituted by one or more substituents selected from halogen, C_{1-4} alkyl, hydroxy, C_{1-4} alkoxy or halo C_{1-4} alkyl; and

r is zero or an integer from 1 to 4;

Z is O, CH_2- or a single bond;

n is an integer of from 1 to 4;
m is zero or an integer of from 1 to 4;
p is zero or an integer of from 1 to 3;
k is an integer from 1 to 3; and
t is zero or 1.

2. (Original) A compound of formula (Ia):



(Ia)

or a salt, solvate, or physiologically functional derivative thereof, wherein:

k is an integer from 1 to 3;
n is an integer of from 1 to 4;
m is an integer of from 2 to 4;
p is an integer of from 1 to 4;
Z is O or CH_2-;

R^1 is selected from hydrogen, C_{1-6}alkyl, hydroxy, cyano, nitro, halo, C_{1-6}haloalkyl, XCO_2R^8, $-XC(O)NR^7R^8$, $-XNR^6C(O)R^7$, $-XNR^6C(O)NR^7R^8$, $-XNR^6C(O)NC(O)NR^7R^8$, $-XNR^6SO_2R^7$, $-XSO_2NR^9R^{10}$, XSR^6, $XSOR^6$, XSO_2R^6, $-XNR^7R^8$, $-XNR^6C(O)OR^7$,
or R^1 is selected from -X-aryl, -X-hetaryl, or -X-(aryloxy), each optionally substituted by 1 or 2 groups independently selected from hydroxy, C_{1-6}alkoxy, halo, C_{1-6}alkyl,
C_{1-6}haloalkyl, $-NR^6C(O)R^7$, SR^6, SOR^6, $-SO_2R^6$, $-SO_2NR^9R^{10}$, $-CO_2R^8$, $-NR^7R^8$, or hetaryl optionally substituted by 1 or 2 groups independently selected from hydroxy, C_{1-6}alkoxy, halo, C_{1-6}alkyl, or C_{1-6}haloalkyl;

X is $-(CH_2)_q-$ or C_{2-6} alkenylene;

q is an integer from 0 to 6;

R^6 and R^7 are independently selected from hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, aryl, hetaryl, hetaryl(C_{1-6}alkyl)- and aryl(C_{1-6}alkyl)- and R^6 and R^7 are each independently optionally substituted by 1 or 2 groups independently selected from halo, C_{1-6}alkyl,
C_{3-7} cycloalkyl, C_{1-6} alkoxy, C_{1-6}haloalkyl, $-NHC(O)(C_{1-6}$alkyl), $-SO_2(C_{1-6}$alkyl), $-SO_2$(aryl), $-CO_2H$, and $-CO_2(C_{1-4}$alkyl), $-NH_2$, $-NH(C_{1-6}$alkyl), aryl(C_{1-6}alkyl)-, aryl(C_{2-6}alkenyl)-,
aryl(C_{2-6}alkynyl)-, hetaryl(C_{1-6}alkyl)-, $-NHSO_2$aryl, -NH(hetarylC_{1-6}alkyl), $-NHSO_2$hetaryl,
$-NHSO_2(C_{1-6}$alkyl), -NHC(O)aryl, or -NHC(O)hetaryl:

R^8 is selected from hydrogen, C_{1-6}alkyl and C_{3-7} cycloalkyl;

or R^7 and R^8, together with the nitrogen atom to which they are bonded, form a 5-, 6- or 7- membered nitrogen – containing ring;

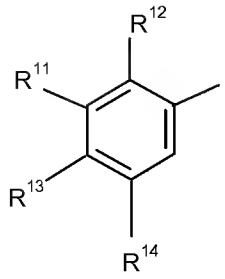
R^9 and R^{10} are independently selected from hydrogen, C_{1-6}alkyl, C_{3-7}cycloalkyl, aryl, hetaryl, hetaryl(C_{1-6}alkyl)- and aryl(C_{1-6}alkyl)-, or R^9 and R^{10}, together with the nitrogen to which they are bonded, form a 5-, 6-, or 7- membered nitrogen containing ring;
and R^9 and R^{10} are each optionally substituted by one or two groups independently selected from halo, C_{1-6}alkyl, and C_{3-7}cycloalkyl, C_{1-6}haloalkyl;

R^2 is selected from hydrogen, hydroxy, C_{1-6}alkyl, C_{1-6}alkoxy, halo, aryl, aryl(C_{1-6}alkyl)-, C_{1-6}haloalkoxy, and C_{1-6}haloalkyl;

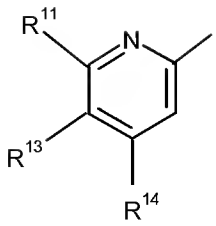
R^3 is selected from hydrogen, hydroxy, C_{1-6}alkyl, C_{1-6}alkoxy, halo, aryl, aryl(C_{1-6}alkyl)-,
C_{1-6}haloalkoxy, and C_{1-6}haloalkyl; and

R^4 and R^5 are independently selected from hydrogen and C_{1-4} alkyl with the proviso that the total number of carbon atoms in R^4 and R^5 is not more than 4;

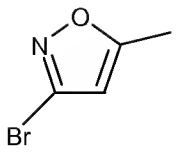
Ar^1 is a group selected from



(a)

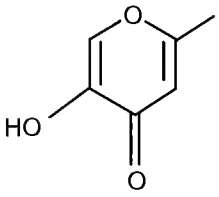


(b)



(c)

and



(d)

wherein R^{11} represents halogen, $-(CH_2)_rOR^{15}$, $-NR^{15}C(O)R^{16}$, $-NR^{15}SO_2R^{16}$, $-SO_2NR^{15}R^{16}$, $-NR^{15}R^{16}$, $-OC(O)R^{17}$ or $OC(O)NR^{15}R^{16}$,
and R^{12} represents hydrogen, halogen or C_{1-4} alkyl;

or R^{11} represents $-NHR^{18}$ and R^{12} and $-NHR^{18}$ together form a 5- or 6-membered heterocyclic ring;

R^{13} represents hydrogen, halogen, $-OR^{15}$ or $-NR^{15}R^{16}$;

R^{14} represents hydrogen, halogen, haloC_{1-4} alkyl, $-OR^{15}$, $-NR^{15}R^{16}$, $-OC(O)R^{17}$ or $OC(O)NR^{15}R^{16}$

R^{15} and R^{16} each independently represents hydrogen or C_{1-4} alkyl, or in the groups
$-NR^{15}R^{16}$, $-SO_2NR^{15}R^{16}$ and $-OC(O)NR^{15}R^{16}$, R^{15} and R^{16} independently represent hydrogen or C_{1-4} alkyl or together with the nitrogen atom to which they are attached form a 5-, 6- or 7- membered nitrogen-containing ring,

R^{17} represents an aryl group which may be unsubstituted or substituted by one or more substituents selected from halogen, C_{1-4} alkyl, hydroxy, C_{1-4} alkoxy or halo C_{1-4} alkyl; and

r is zero or an integer from 1 to 4.

3. (Previously Presented) A compound according to claim 1 wherein the group R^1 is selected from hydrogen, C_{1-4}alkyl, hydroxy, halo, $-NR^6C(O)NR^7R^8$, $-NR^6C(O)R^7$, $-SO_2NR^9R^{10}$, $-SOR^6$, $-SO_2R^6$, and $-NR^6SO_2R^7$ wherein R^6 and R^7 are as defined in claim 1 or claim 2.

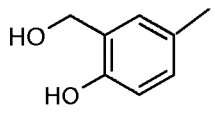
4. (Previously Presented) A compound according to claim 1 wherein R^2 and R^3 are independently selected from hydrogen, hydroxyl, halogen, haloC_{1-6}alkyl, C_{1-6}alkyl, C_{1-6}alkoxy and haloC_{1-6}alkoxy.

5. (Previously Presented) A compound according to claim 1 wherein R^4 and R^5 each represent hydrogen.

6. (Previously Presented) A compound according to claim 1 wherein R^a and R^b each represent hydrogen.

7. (Canceled)

8. (Original) A compound according to claim 7 wherein the group (a) is a group of formula (i):



(i)

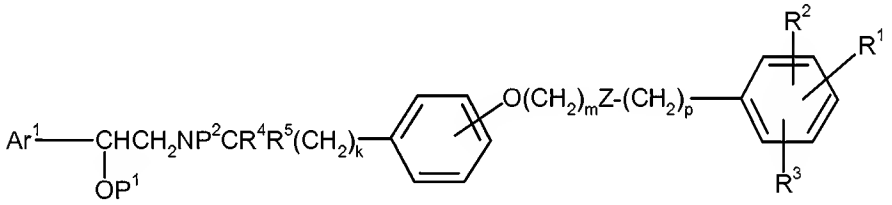
9-12. (Canceled)

13. (Previously Presented) A pharmaceutical formulation comprising a compound of formula (I), according to claim 1, or a pharmaceutically acceptable salt, solvate, or physiologically functional derivative thereof, and a pharmaceutically acceptable carrier or excipient, and optionally one or more other therapeutic ingredients.

14. (Cancelled)

15. (Previosly Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises:

deprotecting a protected intermediate of formula (II):



(II)

or a salt or solvate thereof, wherein R^1, R^2, R^3, R^4, R^5, Z, k, m, n and p are as defined for the compound of formula (I), and P^1 and P^2 each independently represents hydrogen or a protecting group provided that the compound of formula (II) contains at least one protecting group

wherein said deprotecting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

(i) removing any protecting groups;

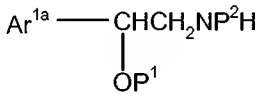
(ii) separating an enantiomer from a mixture of enantiomers; and

(iii) converting the product to a corresponding salt, solvate,

or physiologically functional derivative thereof.

16. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises

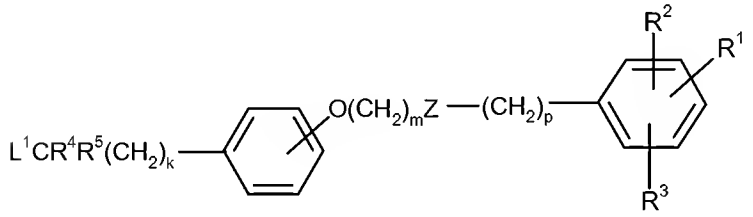
alkylating an amine of formula (X)



(X)

wherein Ar^{1a} is Ar^1 or a protected form thereof, and P^2 and P^1 are each independently either hydrogen or a protecting group,

with a compound of formula (XI):



(XI)

wherein R^1, R^2, R^3, R^4, R^5, Z, k, m, n and p are as defined for the compound of formula (I) and L^1 is a leaving group;

wherein said alkylating step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

(i) removing any protecting groups;

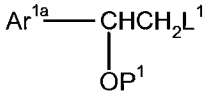
(ii) separating an enantiomer from a mixture of enantiomers; and

(iii) converting the product to a corresponding salt, solvate,

or physiologically functional derivative thereof.

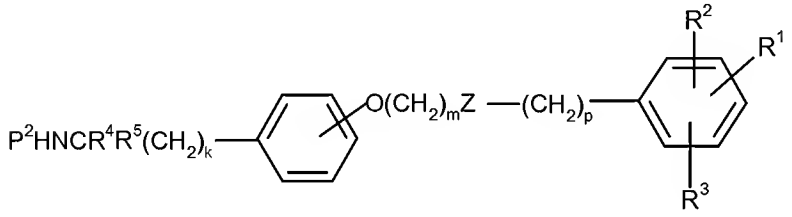
17. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises

reacting a compound of formula (XII):



(XII)

wherein Ar^{1a} is Ar^1 or a protected form thereof, P^1 is either hydrogen or a protecting group and L^1 is a leaving group, with an amine of formula (XIII):



(XIII)

wherein P^2 is either hydrogen or a protecting group

wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

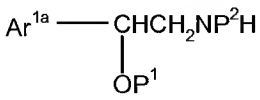
(i) removing any protecting groups;

(ii) separating an enantiomer from a mixture of enantiomers; and

(iii) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

18. (Previously Presented) A process for the preparation of a compound of formula (I), according to claim 1, or a salt, solvate, or physiologically functional derivative thereof, which comprises

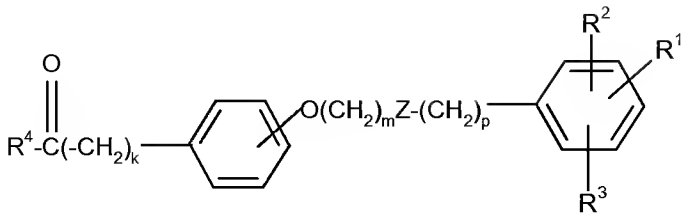
reacting a compound of formula (X):



(X)

wherein Ar^{1a} is Ar^1 or a protected form thereof, and P^1 and P^2 are each independently either hydrogen or a protecting group,

with a compound of formula (XIV):



(XIV)

under conditions suitable to effect reductive amination;

wherein said reacting step is optionally followed by one or more of the following steps in any order selected from the group consisting of:

(i) removing any protecting groups;

(ii) separating an enantiomer from a mixture of enantiomers; and

(iii) converting the product to a corresponding salt, solvate, or physiologically functional derivative thereof.

19. (Previously Presented) The method according to Claim 10, wherein the mammal is a human.

20. (Previously Presented) The method according to Claim 10, wherein the clinical condition is asthma.

21. (Previously Presented) The method according to Claim 10, wherein the clinical condition is COPD.